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ABSTRACT

A study tested the proposition that three factors influencing voter behavior in nonpartisan school budget elections are (1) fiscal decisions made by boards of education, (2) fiscal commitments that are uncontrollable by boards of education, and (3) expenditures made by other governmental units. The study concluded that (1) about one-half of the variance in voter participation and dissent is not explained by these factors, (2) the most consistent stimuli of participation and dissent are uncontrollable by boards of education in the budget election year, (3) teacher salary increases do not affect participation and dissent, (4) nonschool fiscal and economic factors are not important predictors of voter behavior in school budget elections, (5) the influence of fiscal and economic factors on electoral behavior differs according to the school district's location, and (6) participation and dissent in school budget elections are highly related. Three factors that could result in negative voting are (1) community conflict over a nonfiscal educational issue, (2) organized opposition to the school board, and (3) contests for school board seats. (Author/LLR)

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# THE RELATIONSHIP BETWEEN SELECTED FISCAL AND ECONOMIC FACTORS AND VOTING BEHAVIOR IN SCHOOL BUDGET ELECTIONS IN NEW YORK STATE

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# INTRODUCTION

School budget elections have an unique place in the political life of American citizens. They represent the only situation in local, state or national government in which a duly elected legislative body is required to annually submit its proposed operating budget for the ensuing fiscal year to the electorate for approval. Citizens are thus presented with the opportunity to play a direct role by virtue of their participation in the election in the establishment of school district policy.

Failure of an increasing number of districts in many states to win approval for budgets in the public referendum has attracted the attention of concerned laymen, educators and researchers in recent years. While there is some evidence that the "taxpayers revolt" of the 1950's and early 1960's was more myth than reality (Carter, 1961 and Minar, 1966), there is no doubt that voter resistance to constantly rising school property tax rates increased dramatically toward the end of the last decade.

The magnitude of the increase in New York State is illustrated in Table 1. The sixteen budget defeats in 1965 represented 1.7 percent of the original submission budget elections in that year. The number of defeats doubled in 1966 and again in 1967. Finally, 1969 witnessed a high of 137.

These increases in defeats are even more dramatic when compared to the decline in total number of school districts conducting budget elections. Due to the consolidation and annexation of districts, the number of common, union free and centralized school districts in which budget elections occur was reduced from 925 in 1965 to 690 in 1969. The 137 defeats in 1969 represented 20 per cent of the elections compared to 1.7 percent in 1965.

Another manifestation of the problem in New York State is its spread from the major metropolitan areas to all areas of the state. As recent as 1967 only 12 per cent of the school districts outside of Standard Metropolitan Statistical Areas (SMEA) experienced budget defeats. That figure increased to 31 per cent in 1969. Moreover, eighteen of the defeating districts had enrollments of

TABLE 1

NUMBER OF SCHOOL DISTRICTS EXPERIENCING
BUDGET REJECTIONS IN NEW YORK STATE
1957-69

| Year | Number of Districts Voting | Defeats | Per Cent |
|---|---|---|---|
| 1957 | * | 17 | * |
| 1958 | * | 15 | * |
| 1959 | * | 34 | * |
| 1960 | 1221 | 8 | .6 |
| 1961 | * | 20 | * |
| 1962 | * | 28 | * |
| 1963 | 1043 | 39 | 3.7 |
| 1964 | * | 27 | * |
| 1965 | 925 | 16 | 1.7 |
| 1966 | 872 | 32 | 3.7 |
| | Mean number of defeats 1957-1966 | 23.6 | |
| | Standard deviation 1957-1966 | 9.4 | |
| 1967 | 786 | 69 | 9.0 |
| 1968 | 763 | 76 | 10.2 |
| 1969 | 690 | 137 | 20.0 |

* Data not available

less than 1,000; seven had less than 500. One district had only eighty-two pupils in grades kindergarten through six. Clearly, taxpayer resistance to the spending plans of boards of education has become a potential reality for school districts in all areas of New York State.

Concern over the increase in budget defeats has focused on two sets of problems. First, how do school districts cope with the conflicting pressures of increased costs and reduced revenues? And in which areas should instructional programs be modified to meet apparent electoral demand for reduced spending? Compounding these questions is the paradox observed when some of the same electorates which fail to support school district spending programs in the spring submit demands for more services and more "quality" at other points in the school year.

The second set of problems deals with the political implications surrounding the failure of an electorate to support board of education fiscal plans. Why are budgets turned down? What are the factors that stimulate increased participation and dissent? Should budget elections be abolished?

This paper deals with the second of those areas of concern. Specifically, a study is reported which sought to provide insight into the relationship between fiscal factors associated with budget decisions and increases in voter participation and dissent in school budget elections. The first section of the report is devoted to a brief examination of the theoretical framework in which voting takes place. A second section reviews an analysis of 261 school budget elections that occurred in New York State in the spring of 1969. A third section examines conclusions drawn from the somewhat mixed findings of that analysis. The final section is devoted to a discussion of non-fiscal factors.

## VOTER BEHAVIOR AND SCHOOL FINANCIAL ELECTIONS

The literature on voting behavior in partisan and school financial elections suggests that voter affiliation and participation fit stable patterns over time. Changes in stable patterns can occur when latent opinions are activated by certain stimuli. If these newly activated opinions reach sufficient intensity, they

can result in changed behavior, particularly a decision to participate in the election, provided the individual experiences a sense of efficacy, a belief that his vote will count (Campbell, 1960; Key, 1963).

Voters who regularly participate in school budget elections tend to be supporters of the schools, and they represent a comparatively small percentage of the potential electorate. When certain stimulus situations occur, citizens who do not normally participate are drawn into the election. And when that election involves a first submission budget, the new voters will more than likely cast negative ballots. Indeed, Spinner contends that an increase in the normal participation pattern of as little as five per cent will more than likely result in the defeat of the referendum (Spinner, 1968).

So the question now becomes, which stimulus factors motivate citizens to participate and cast negative ballots in school budget elections? In other words, which factors draw in the normally aquiescent or apathetic non-participants who tend to cast "no" ballots?

One explanation commonly offered by educators and citizens alike is that voters go to the polls to take out their frustrations about steadily mounting taxes at the local, state, and national levels on the education budget. Voters, it is said, vent their anger on school spending plans. The assumption is that the more school costs and the resulting property taxes increase, the more likely that school budgets will be defeated. This notion holds that increases in certain fiscal and economic factors related to school districts and local government are important stimuli to changes in electoral behavior. It has had some support from studies that have queried individual voters as to why they voted as they did or compared tax rates in passing and defeating school districts. But the proposition has not, up to this point, been subjected to systematic investigation to determine the extent of the relationship between fiscal and economic factors associated with school finance and the behavior of local school district electorates. It was the intent, then, of this effort to investigate empirically what is essentially an a priori explanation of why electorates behave as they do.

A Proposed Model

The specific purpose of this study was to test the proposition that (1) fiscal decisions made by boards of education, (2) fiscal commitments not currently controllable by boards of education and (3), expenditures by other governmental units are three key sets of factors which influence voting behavior in non-partisan school budget elections. The principal objective was to predict variations in participation and dissent in the elections resulting from variations in the selected fiscal and economic factors.

Model I illustrates the relationship between three categories of input or stimulus factors and the outcomes of voter participation and dissent suggested by the above proposition. The stimulus factors at the left of the model are affected by variations in the background factors of size, growth and wealth in the outer circle. Values and attitudes of individual voters represented by their own political pre-dispositions have been the focus of much of the research in voter behavior and are noted in the box in the center. The individual opinion properties of stability, intensity and latency affect the extent to which stimulus factors influence electoral behavior.

The ten independent or predictor (stimulus) variables, two dependent or criterion variables and four background variables are summarized in Table 1. The category School Factors: Board of Education Decisions includes those stimuli that are directly related to educational costs the amounts of which are determined by the board of education. Though board of education members may genuinely wonder how much flexibility they actually have in making decisions about these factors, electorates certainly hold their boards accountable for increases when they occur. The predictor variables utilized for these factors represent increases from the operating budget for 1968-1969 in each district to the proposed budget that the electorate was asked to approve for 1969-1970.*

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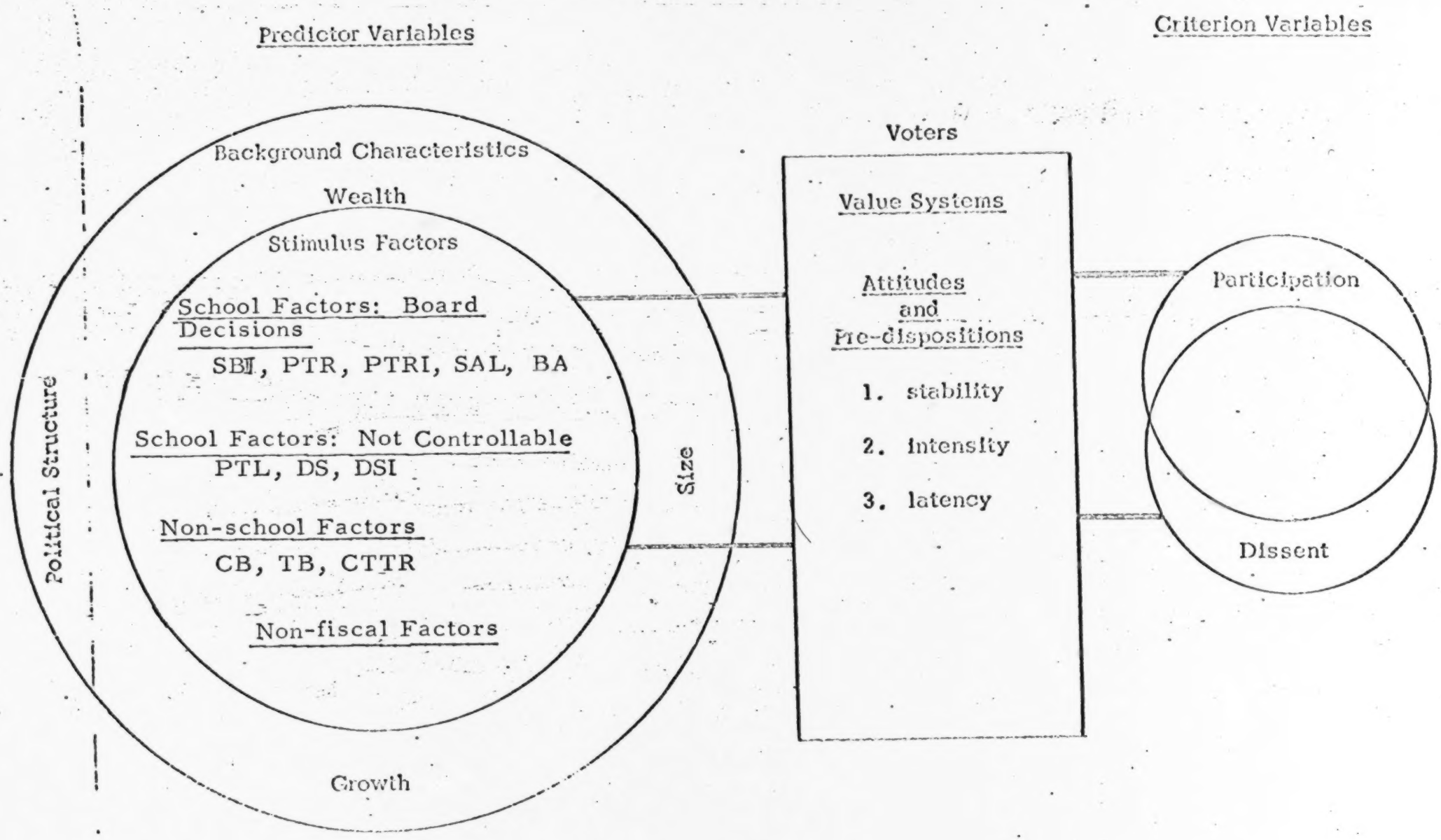
*It should be noted that the property tax rate was not used as a predictor variable under the assumption that potential voters would be influenced by increases in the rate from one year to another. Attention will be given to the tax rate itself later in this paper.

## MODEL

THE RELATIONSHIP BETWEEN SELECTED STIMULUS FACTORS AND ELECTORAL BEHAVIOR IN SCHOOL BUDGET ELECTIONS



## SUMMARY OF VARIABLES

| | |
|---|---|
| SBI | Per cent increase in school budget |
| PTR | Dollar amount of school property tax per $1,000 full valuation |
| PTRI | Dollar amount increase in school property tax rate per $1,000 full valuation |
| SAL | Per cent increase in the sum of budget codes A220-110, A220-111, A220-112 salaries for classroom teachers |
| BA | Per cent increase in BA minimum of the teacher salary schedule |
| PTL | Per cent of the school budget to be raised from the local school property tax levy |
| DS | Per cent of the school budget for debt service |
| DSI | Per cent increase in debt service |
| CB | Per cent increase in county budget |
| TB | Per cent increase in town budget |
| CTTR | Dollar amount increase in county-town property tax rate per $1,000 full valuation |
| PVPP | Dollar amount real valuation per Weighted Average Daily Attendance |
| MFI | Median family income by county in 1967 |
| PARTICIPATION | Number of votes cast in an election per each 100 resident children under eighteen years of age |
| DISSENT | Number of negative votes cast in an election per each 100 resident children under eighteen years of age |

The category School Factors: Not Controllable by the Board of Education represents characteristics of the local school budget and school fiscal climate over which the board of education has no control at the time of the current election. Payments to debt service, including both principal and interest, reflect the influence of past events on current spending. The portion of the budget to be raised from the local property tax levy represents provisions of the state aid formula as they affect the individual districts. Both factors are major determinants of the amount of money available for current expenditures within a total school district budget.

The category Non-School Factors deals with the proposition that voters take out their frustrations about constantly rising expenditures and taxes for municipal, state and federal governments at the school budget election. The factors used in this category are increases in the county budget, the general fund appropriation of the budget for the town in which is found the largest portion of the school district's real property valuation and the increase in the county-town property tax rate from fiscal 1968 to fiscal 1969. The county-town property tax rate has the advantage of being a tax administered on the same base as the school property tax and as such can be readily compared by the property owner. In addition, it is easily utilized in the analysis of aggregate community data.

The final category, Non-Fiscal Factors, was not a subject of this investigation. Potential relationships between non-fiscal stimuli and electoral behavior will be discussed briefly in the final section of this paper.

The voting behavior of a cross section of electorates in almost forty per cent of the school districts in New York State was observed for this study. The specific behavior investigated was the incidence of participation and dissent in the first budget submitted to each electorate in May, June or July of 1969. If the original referendum was defeated, subsequent referenda in the same district were not observed. The value of each of the dependent variables was expressed as the number of votes cast per each 100 children under eighteen years of age who resided within the boundaries of the school district.

Referenda selected for observation were categorized into two

groups. The first group included 135 of the 137 districts in which the original referendum was defeated. One of the two remaining districts is a centralized high school district in which the electorate votes on school budgets in each of the contributing elementary school districts as well as the common high school district. For this reason it was excluded from the sample. The other defeated district not included in the study changed structurally between 1968 and 1969 as a result of centralization, thus making it impossible to compare school district financial data for the two years.

The second group of districts was comprised of a random sample of 135 of the 555 remaining union free and central school districts throughout the state in which the budget referendum passed when first submitted. As was the case in defeating districts, centralized high school districts and those involved in centralizations or annexations were not included.

Most of the school district data were obtained from budget reports submitted by each district to the Division of Educational Management Services of the New York State Education Deparment. Salary data for all districts as well as voting tallies, amount of budget and amount of property tax levy for defeating districts were obtained by questionnaire from each of the districts. Data relative to town and county budgets and tax rates were obtained from the official proceedings of the Board of Supervisors, 1967 and 1968 for each of the counties in which one of the 270 school districts was located. Usable data were collected from 135 passing districts and 126 defeating districts for a total of 261.

Means and standard deviations for passing and defeating districts appear in Table 2. Notable differences between the two categories are the mean increase in the school property tax rate which is slightly more than $1.00 greater in defeating districts than in passing, the portion of the budget to be raised from the local property tax levy which is one-third greater in defeating districts, and that defeating districts are larger and wealthier than passing. For the dependent variables, participation is twice as large and dissent four times as large in defeating districts.

The correlation matrix for the original sixteen variables is found in Table 3. Two factors stand out. First, the two dependent variables, participation and dissent, are strongly correlated; the correlation coefficient is .94. Second, the property tax levy is strongly correlated with both participation and dissent at .53 and .49 respectively. Other

TABLE 2

MEANS AND STANDARD DEVIATIONS FOR SIXTEEN VARIABLES
FOR 261 SCHOOL DISTRICTS IN NEW YORK STATE

| Variables | Passing Districts Mean | Passing Districts St. Dev. | Defeating Districts Mean | Defeating Districts St. Dev. |
|---|---|---|---|---|
| School factors (decisions) | | | | |
| SBI - school budget | 8.9 % | 6.8 % | 11.4 %** | 6.7 % |
| PTRI - school tax rate increase | $2.64 | $1.90 | $3.79 ** | $2.29 |
| SAL - teacher salaries | 8.4 % | 7.7 % | 9.9 % | 15.6 % |
| BA - salary schedule | 4.6 % | 2.5 % | 4.9 % | 3.0 % |
| School factors (not board decisions for current year) | | | | |
| PTL - property tax levy | 33.2 % | 18.0 % | 45.7 %** | 18.2 % |
| DS - debt service | 9.8 % | 5.9 % | 9.3 % | 3.5 % |
| DSI - increase in debt service | 21.1 % | 90.5 % | 11.4 % | 26.1 % |
| Non-school factors | | | | |
| CB - county budget | 18.4 % | 38.7 % | 19.4 % | 9.7 % |
| TB - town budget | 22.9 % | 82.9 % | 19.0 % | 16.5 % |
| CTTR - county-town tax rate | $.72 | $12.32 | $.36 | $2.65 |
| Background factors | | | | |
| GWTH | 5.5 % | 23.1 % | 7.1 % | 15.9 % |
| SIZE | 2497 | 2547 | 3847** | 3320 |
| PVPP | $21,396 | $17 115 | $27,753** | $15,333 |
| MFI | $ 2,781 | $ 604 | $ 3,383** | $ 954 |
| Criterion variables | | | | |
| participation | 15.3 | 11.1 | 31.3 ** | 13.5 |
| dissent | 4.9 | 5.1 | 18.3 ** | 8.4 |

* significant at .05 level

** significant at .01 level

TABLE 3: CORRELATIONS AMONG SIXTEEN VARIABLES IN ALL DISTRICTS

| | SBI | PTRI | SAL | BA | PTL | DS | DSI | CB | TB | CTTR | PART | DIS | GWTH | SIZE | PVPP | MFI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| School Budget Increase | 1.00 | +.37 | +.30 | +.19 | +.35 | +.18 | + 37 | +.06 | +.05 | +.02 | +.15 | +.21 | +.38 | +.18 | +.29 | +.27 |
| Property Tax Rate Increase | .... | 1.000 | +.08 | +.05 | +.23 | -.06 | +.02 | +.04 | +.03 | -.03 | +.19 | +.28 | +.06 | +.08 | +.05 | +.23 |
| Teacher Salaries Increase | .... | .... | 1.000 | +.18 | +.29 | +.05 | +.01 | +.06 | +.04 | +.03 | +.15 | +.16 | +.25 | +.17 | +.17 | +.13 |
| BA Minimum Increase | .... | .... | .... | 1.00 | 0.27 | -.06 | +.03 | +.09 | +.02 | +.05 | +.15 | +.13 | +.06 | +.0' | +.30 | +.11 |
| Property Tax Levy | .... | .... | .... | .... | 1.00 | -.17 | -.08 | +.17 | +.14 | +.06 | +.53 | +.49 | +.10 | +.24 | +.76 | +.67 |
| Debt Service | .... | .... | .... | .... | .... | 1.000 | +.49 | -.02 | -.03 | +.02 | -.08 | -.04 | +.26 | +.19 | -.19 | -.10 |
| Debt Service Increase | .... | .... | .... | .... | .... | .... | 1.000 | -.04 | -.02 | -.02 | -.11 | -.08 | +.14 | -.03 | -.05 | -.03 |
| County Budget Increase | .... | .... | .... | .... | .... | .... | .... | 1.000 | +.91 | +.92 | +.04 | +.05 | +.03 | +.09 | +.11 | +.14 |
| Town Budget Increase | .... | .... | .... | .... | .... | .... | .... | .... | 1.000 | +.90 | -.01 | +.02 | +.03 | +.04 | +.09 | +.08 |
| County-Town Property Tax Rate Increase | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.000 | -.01 | -.01 | +.04 | +.02 | +.05 | -.00 |
| Participation | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.000 | +.94 | -.02 | +.09 | +.32 | +.35 |
| Dissent | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.00 | +.01 | +.14 | +.29 | +.40 |
| Growth | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.00 | +.16 | +.09 | +.07 |
| Size | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.00 | +.03 | +.31 |
| Property Value Per Pupil | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.00 | +.45 |
| Median Family Income | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.00 |

Values above 11 are significant at .05 level
Values above 16 are significant at .01 level
N = 261

strong correlations can be observed between increases in town and county budgets and the increase in the county-town tax rate. Also, the expected strong correlations between wealth in terms of both per pupil property valuation and median family income are .76 and .67 respectively.

## ANALYSIS OF THE DATA

Analysis of the data sought to answer two questions about the relationship between the stimulus factors and voter participation and dissent. First, is there a positive, statistically significant relationship between each predictor variable and each criterion variable? Second, to what extent does each predictor variable contribute to variations in each criterion variable?

In answering these questions, data were analyzed in four categories using a linear multiple regression technique designed to show the extent to which each predictor variable uniquely contributes to variations in participation and dissent. In the first series of runs, data for the entire sample were organized into four categories: passing-participation, passing-dissent, defeating participation, defeating-dissent.

Table 4 shows the variables included in each run for each category. The first regression included all fourteen variables. (The fifteenth variable is the second dependent variable and was, of course, excluded in all runs.) The second regression excluded the four control variables as a group to determine the variance uniquely contributed by enrollment, growth, taxable wealth and median family income. Then each of the ten predictor variables was excluded one at a time and each group of variables excluded one at a time. In addition, the two tax rates were excluded together.

The results of this series of runs are indeed surprising. Only one of the fiscal and economic factors has a positive, statistically significant relationship to participation and dissent. (See appendix A for the tables of standard regression coefficients for this series of runs.) And the same factor, the portion of the school budget to be raised from the property tax levy, is the only one that has an important effect on the criterion variables. As Table 5 shows, once the background variables are excluded, the fiscal and economic factors account for only 18 to 29 per cent of the variance, depending upon the category. The tax levy contributes 5 to 18 per cent of that small amount.

More surprising is the almost total lack of importance of the two categories of variables expected to be strong indicators of participation and dissent consistent with the common notion about causes of voter

TABLE 4

PREDICTOR VARIABLES INCLUDED AND EXCLUDED
FROM MULTIPLE REGRESSION RUNS *

| Number of Run | Variables Excluded | Number of Variables Included |
|---|---|---|
| 1 | | 14 |
| 2 | SIZE, GWTH, PVPP, MFI | 10 |
| 3 | SBI | 13 |
| 4 | PTRI | 13 |
| 5 | SAL | 13 |
| 6 | BA | 13 |
| 7 | SAL, BA | 12 |
| 8 | SBI, PTRI, SAL, BA | 10 |
| 9 | PTL | 13 |
| 10 | DS | 13 |
| 11 | DSI | 13 |
| 12 | PTL, DS, DSI | 11 |
| 13 | CB | 13 |
| 14 | TB | 13 |
| 15 | CTTR | 13 |
| 16 | CB, TB, CTTR | 11 |
| 17 | PTRI, CTTR | 12 |

*The property tax rate (PTR) was not included in this series of regression runs.

TABLE 5

UNIQUE CONTRIBUTIONS OF FOURTEEN PREDICTOR VARIABLES TO VARIANCE IN PARTICIPATION AND DISSENT
($R^2$ of all variables - $R^2$ of variable i)

| Variables | Passed | | Defeated | |
|---|---|---|---|---|
| | Part | Dissent | Part | Dissent |
| All variables | .33** | .37** | .28** | .26** |
| All variables less background variables | .28** | .29** | .22** | .19** |
| 11-14, background variables | .04 | .08** | .07* | .08** |
| School factors (board decisions) | | | | |
| 1, increase in budget | .00 | .00 | .00 | .00 |
| 2, tax rate | .00 | .00 | .00 | .00 |
| 3, teacher salaries | .00 | .00 | .00 | .00 |
| 4, BA minimum | .00 | .00 | .01 | .01 |
| 3 & 4 | .01 | .00 | .01 | .01 |
| 1-4 | .01 | .01 | .01 | .02 |
| School factors (not board decisions for current year) | | | | |
| 5, tax levy | .18** | .16** | .08** | .05** |
| 6, debt service | .00 | .01 | .04** | .04** |
| 7, increase in debt service | .00 | .00 | .02* | .01 |
| 5-7 | .18** | .17** | .12** | .09** |
| Non-school factors | | | | |
| 8, county budget | .00 | .00 | .00 | .00 |
| 9, town budget | .00 | .00 | .02** | .03** |
| 10, tax rate | .00 | .00 | .00 | .00 |
| 8-10 | .00 | .00 | .03 | .03 |

* significant at .05 level
** significant at .01 level

resistance. Neither School Factors: Board Decisions nor Non-School Factors appear to influence electoral behavior in any discernable manner.

But a careful look at the results also suggests that some strange things may be happening as a result of analyzing the data for the state as a whole. For example, the indication that defeating districts are wealthier than passing districts is not only contrary to a common sense expectation, but also runs counter to previous research on school financial elections (Minar, 1966). The high correlation between wealth and tax levy suggests that the explanation may be found by looking at the wealthier metropolitan New York area in which fifty-eight of the 137 defeats occurred independent of the remainder of the state. And the importance of the tax levy as a predictor of participation and dissent also suggests that it might be useful to include the tax rate -- the reader will remember that the increase in tax rate was the variable used -- as a potential predictor variable. The assumption is that the unusual upstate-downstate differences that characterize New York State educational finance data may be masking the real influence of fiscal and economic factors on electoral behavior.

With this problem in mind, the 261 districts were stratified into three groups and subjected to a series of regression runs independently for each group. The two salary variables and the entire Non-School Factors group were dropped since they had no explanatory value in the first series of runs. The school property tax rate was included along with the increase in school budget and increase in tax rate in the School Factors: Board Decisions group. Changes from the original series of runs are notable. Though fewer predictor variables were included, the amount of variance in voter participation and dissent attributable to all variables ranged from a low of 43 per cent to a high of 53 per cent. But the more striking result is the differences observed between the three groups of districts. Table 6 shows that in rural districts (Non-SMSA) the fiscal and economic factors contribute approximately one-fifth of the variance while in the other two groups (Metropolitan New York City SMSA and Upstate SMSA) they predict between 33 and 40 per cent. Also, in the latter two groups of districts the School Factors: Board Decisions category has become particularly important. The School Factors: Not Controllable group retains its strength only in the Metropolitan New York SMSA districts.

Table 6

COMPARISON OF UNIQUE CONTRIBUTIONS OF PREDICTOR VARIABLES
BY GROUP AND BY LOCATION OF DISTRICTS

| | Participation | | | Dissent | | |
|---|---|---|---|---|---|---|
| | NY-SMSA | Upstate SMSA | Rural | NY-SMSA | Upstate SMSA | Rural |
| All Variables | .43 | .48 | .23 | .47 | .53 | .23 |
| Background Variables | .06 | .15 | .01 | .07 | .14 | .03 |
| Six Fiscal Variables | .37 | .34 | .22 | .40 | .39 | .16 |
| Three School Factors SBI, PTR, PTRI | .11 | .21 | .01 | .21 | .23 | .01 |
| Three School Factors PTL, DS + DSI | .26 | .03 | .02 | .18 | .02 | .02 |
| Passed | n=19 | n=28 | n=88 | | | |
| Failed | n=58 | n=29 | n=39 | | | |

(In some subsequent runs the tax rate was included in this category rather than in School Factors: Board Decisions substantially increasing the unique contribution of that category.)

Despite these interesting differences, some caution is in order in interpreting the data when run for the three groups of districts. First, passing districts were not sampled randomly within the three groups, but throughout the state as a whole. Second, and closely related to the sampling technique, only in the Upstate SMSA were passing and defeating districts reasonably balanced. The New York SMSA, for example, had fifty-eight defeating and only nineteen passing districts. In each of the three groups, however, the means of the background variables were subjected to a t-test for two independent samples. The results of those tests indicate that the groups are representative of the population of school districts within each group.

Table 7 summarizes the results of the regression runs for the Metropolitan New York SMSA. Increases in the budget and tax rate are mildly influential, but they are also overshadowed by the importance of the tax rate itself for both participation and dissent. And the influence of the tax levy variable is particularly important in the second group of factors.

The summary of the Upstate SMSA data in Table 8 raises some interesting questions about the possible interactions that may be occurring among predictor variables. The unique contributions of individual as well as groups of variables fall far short of adding up to the variance explained by all variables, something that does not occur in the New York SMSA. Though the total $r^2$ is much lower in rural districts, the same results can be observed in Table 9. The extent and nature of the interactions are left unexplained by the statistical treatment used in this study, but they deserve additional examination.

## CONCLUSIONS

This study sought to determine the relationship between a number of fiscal and economic factors thought to be related to electoral behavior in school budget elections in New York State. Six conclusions can be drawn from the analysis of data.

Table 7

UNIQUE CONTRIBUTIONS OF TEN PREDICTOR VARIABLES TO VARIATION IN VOTER PARTICIPATION AND DISSENT IN 77 SCHOOL DISTRICTS IN METROPOLITAN NEW YORK SMSA*

| Variables | Participation | Dissent |
|---|---|---|
| All variables | .43 | .47 |
| Background variables | .06 | .07 |
| Six fiscal variables (all variables less background variables) | .37 | .40 |
| Three School Factors (Board Decisions) | .11 | .21 |
| Increase in school budget | .04 | .07 |
| Increase in tax rate | .02 | .00 |
| Tax rate | .07 | .10 |
| Three School Factors (Not Board Decisions) | .26 | .18 |
| Tax levy | .20 | .11 |
| Debt service | .01 | .00 |
| Debt service increase | .01 | .05 |

*19 passing districts, 58 failing districts

Table 8

UNIQUE CONTRIBUTIONS OF TEN PREDICTOR VARIABLES TO VARIATIONS IN VOTER PARTICIPATION AND DISSENT IN 57 SCHOOL DISTRICTS IN UPSTATE NEW YORK SMSAs*

| Variables | Participation | Dissent |
|---|---|---|
| All variables | .48 | .53 |
| Background variables | .15 | .14 |
| Six fiscal variables (all variables less background variables) | .34 | .39 |
| Three School Factors (Board Decisions) | .21 | .23 |
| Increase in school budget | .00 | .00 |
| Increase in tax rate | .03 | .05 |
| Tax rate | .11 | .09 |
| Three School Factors (Not Board Decisions) | .03 | .02 |
| Tax levy | .02 | .02 |
| Debt service | .00 | .00 |
| Debt service increase | .00 | .00 |

*28 passing districts, 29 failing districts

Table 9

UNIQUE CONTRIBUTIONS OF TEN PREDICTOR VARIABLES TO VARIATIONS IN VOTER PARTICIPATION AND DISSENT IN 127 SCHOOL DISTRICTS IN RURAL NEW YORK STATE COUNTIES*

| Variables | Participation | Dissent |
|---|---|---|
| All variables | .23 | .19 |
| Background variables | .01 | .03 |
| Six fiscal variables (all variables less back ground variables) | .22 | .16 |
| Three School Factors (Board Decisions) | .01 | .01 |
| Increase in school budget | .00 | .00 |
| Increase in tax rate | .00 | .00 |
| Tax rate | .01 | .00 |
| Three School Factors (Not Board Decisions) | .02 | .02 |
| Tax levy | .02 | .02 |
| Debt service | .00 | .00 |
| Debt service increase | .00 | .00 |

*88 passing districts, 39 failing districts

1. Approximately half of the variance in participation and dissent is not explained by the fiscal and economic factors or the background variables used in this study. Indeed, the fiscal and economic factors explain less than 30 per cent of the variance in either passing or failing districts statewide and not more than 40 per cent when the districts were stratified into Metropolitan New York SMSA, Upstate SMSA and Rural categories. While it may be possible to explain more of the variance in electoral behavior with fiscal variables that were not used such as the increase in the school property tax rate over a period of several years, the evidence at hand suggests that attention be devoted to two other sets of factors. One set deals with provisions of individual school district budgets that turn out to be controversial in the particular community. The second set of factors is non-fiscal in nature. Attention will be given to non-fiscal factors later in this paper.

2. The most consistent stimuli of participation and dissent are not controllable by boards of education in the year in which the election occurs. The portion of the budget to be raised from the local property tax levy is the only important predictor for the state as a whole. When data are examined within stratified groups of school districts, increases in debt service become mildly important in predicting dissent in the Metropolitan New York SMSA, but not in other strata. More important, if one accepts the proposition that boards of education have little if any real control over the level of the property tax rate -- even a small increase makes a high tax rate higher -- there is more reason to be impressed with the importance of factors not controllable by local authorities during the year of the observed referendum.

3. Teacher salary increases have no effect on participation and dissent. This will come as a surprise to those who contend that large salary increases stimulate voter resistance. Even though increases in professional salaries showed a reasonably strong correlation with budget increases, correlation with the criterion variables was quite weak. In addition, the regression coefficients were not significant and the unique contribution was zero in all categories state-wide. It is conceivable that the controversy surrounding a large salary raise in a particular district will create increased participation and negative voting. But it is equally clear that in the aggregate larger salary increases are not

associated with greater participation and dissent.

4. Non-school fiscal factors are not important predictors of electoral behavior in school budget elections. County and town budget increases have no role to play in stimulating participation and dissent. This is also true of the county-town tax rate increase. The county-town property tax rate, the level of taxation for other jurisdictions, does have a mild influence on dissent when data are examined by stratum. In general, voter resistance to school budgets is a function of school district finance and politics and not closely related to other local governmental units.

5. The influence of fiscal and economic factors on electoral behavior differs according to the geographical area in which the school district is located. Indeed, in examining the aggregate influence of school finance data on any phenomenon, the investigator would be well advised to distinguish between districts in the metropolitan New York City area and those in the rest of the state. For example, the mean tax rate in passing districts in the New York SMSA was higher in 1969 than in upstate defeating districts. Similarly, the portion of the school budget to be raised from the local property tax levy was also higher in the downstate area. Both factors are a direct result of the $760 ceiling on per pupil expenditures eligible for state aid under the New York State aid formula. The vast majority of downstate districts spend well above the ceiling.

The most striking difference in the relative influence of the fiscal and economic factors among strata occurs in rural districts. The predictor variables are far less important leaving more variance to be explained by other factors.

6. Participation and dissent in school budget elections are highly related. This finding is consistent with those of earlier studies by Carter (1961), Minar (1966), and Spinner (1968). Generally speaking, the higher the participation, the greater the dissent.

## THE UN-EXPLAINED VARIANCE AND NON-FISCAL FACTORS

The purpose of this study was to investigate empirically one set of stimuli which are assumed to motivate the normally inattentive, uninformed and non-supportive citizens with erratic voting patterns to participate in school budget elections by casting negative ballots.

The set of fiscal and economic factors selected for study are believed by many laymen and educators to be the factors which best explain voter resistance. Indeed, the typical reason given for the defeat of school budgets is that taxpayers are in revolt against increased spending for governmental services, education included, and they are taking out their frustrations on the school budget. But that common assumption is open to question; at best it only partially explains variations in electoral behavior.

With half or more of the variance in voter participation and dissent unexplained by the variables used in this study, it would be useful to consider other factors. While some other factors could certainly be fiscal,* it is doubtful that additional fiscal variables would be regarded as direct or visable stimuli to the same extent as many of those that were used. Non-fiscal factors, particularly those that are related to controversies surrounding the schools are more likely to be direct stimuli of voter participation and dissent.

In approaching the question of the relationship between non-fiscal factors and budget referenda, the findings of this study suggest that the act of voting in a school financial election is often conceptualized in much too narrow terms. It is seen only as support of or failure to support a particular spending plan. While in effect support of the board of education on a financial issue is the immediate question at hand, voters are motivated to participate and cast "yes" or "no" ballots as a result of a configuration of stimuli. School budget elections are not just an opportunity for voters to express their concerns about spending for schools or even poor economic conditions in general. They are also the only opportunity available to most electorates to play a direct role that can have immediate impact in affecting board of education policy decisions. The school budget election becomes for at least some voters, then, a referendum on the effectiveness of the schools in general rather than simply a judgement about the wisdom of a particular spending plan. This notion certainly comes as no surprise to thoughtful observers of school district conflicts.

The specific relationship between non-fiscal stimulus factors and voting behavior involves the notion of <u>latent negativism</u>: negative attitudes toward the school district are activated at occasional school budget elections when there are stimuli present sufficiently strong to

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*The increase in the property tax rate and tax levy over a period of, say, five years are two that come to mind.

motivate the citizen to vote. For example, let us take a citizen who rarely participates in a school budget election. While he is generally apathetic or acquiescent towards school issues, he does harbor feelings that the schools are not doing things the way he would like to see them done. But he rarely has conversations with other citizens about these feelings. When it comes time to vote on the annual budget, he usually concludes, "Why bother?" Then an issue does arise in the community which concerns him, say the implementation of a sex education curriculum or an incident that challenges his concept of proper discipline for pupils. Local newspapers carry stories about the issue. It becomes a topic of conversation in social groups and in the family. The school board and administration are critized for their handling of the situation. Conversations expand to other issues that disturb residents of the school district. Our citizen realizes that others share his negative feelings towards the schools. The result is that he turns out for the budget election and indicates his lack of confidence in the schools by casting a negative ballot.

In other words, the existence of a non-fiscal factor can activate the latent negativism that exists within an electorate and affect the outcome of an election in the same manner as a fiscal issue. The school budget serves as a proxy issue on which some voters choose to withdraw the authority they have given to the board of education. New voters attracted into the election by a controversy disturb the stability of participation patterns. These voters may be saying that taxes are "too high," but they are leaving unsaid another phrase to that sentence, "for what the schools are doing." The dramatic increase in voter resistance to school budgets in New York State in the late 1960's may be a citizens' revolt against the education establishment in general as much as a taxpayers' revolt against increased spending.

Carter and Odell (1966) observed this phenomenon in their studies of communication patterns, citizen participation and voter behavior. They reconstructed over 2,000 conversations in five school districts within the ten day period prior to a financial election. In about half of those conversations in which the election was a topic, another school-related topic was also discussed. The authors note that many electoral decisions are not made on the issue stated for the referendum.

Votes are cast on issues that are seemingly irrelevant to the main issue. Considering this phenomenon, Carter and Odell observe:

> Ultimately, any education issue can be reviewed where there is a vote on board representatives or support for the school program. So the voices of those citizens who do exercise the vote are powerful. But, because they are removed from the course of decision-making, their voices are often frustrated and protesting.
>
> These citizens must speak when they can. And the occasional opportunities they do have must serve as chances to voice their opinions on whatever issue is important to them -- not necessarily the issue which is presented for their approval. Thus, for example, when a sample of registered voters was asked in a previous study what information they wanted during a bond issue campaign (related only to building plans), they most often wanted information on the curriculum. (Carter and Odell, 1966, p. 30)

This "spill-over" effect of one kind of issue into another is a not uncommon factor with which political actors at the local government level including board of education members and school administrators must deal. Coleman, in his study of community conflict, observed the transformations that occur after a conflict has been generated (Coleman, 1957). Conflicts tend to expand from the specific issue to generalized opposition to the leadership structure. New and different issues arise. The community becomes more polarized. One of the perennial issues in school districts is increased spending for the educational program. Certainly the increased level of communication created by an originally unrelated issue or conflict can serve as a catalyst for the expression of negative attitudes toward the schools. And all of the activities surrounding the conflict contribute to the individual voter's sense of political efficacy: his perception that others share his attitudes toward the schools and the board of education and that there will be some value in his voting.

So the level and minifestations of conflict present within a school district are worth examining in any effort to explain the large amount of variance in electoral behavior left un-explained by the fiscal and economic factors included in this study. One of the primary indicators of conflict is the existence of a citizens group organized in opposition to the board of education. The community group may be one of many created in recent years for the sole purpose of reducing

taxes. Or it may emphasize other kinds of issues or have been organized simply to elect certain kinds of candidates to the board of education. In any case, the function of each kind of organized opposition to the board of education is to activate the negativism on the part of citizens who are normally apathetic towards or acquiescent to the manner in which the local schools are operated.

Another factor which also deserves examination is the relationship between the board of education election and the budget referendum. In the vast majority of school districts in New York State voting on both items occurs simultaneously. In the remaining districts the budget referendum and the election of board members occur only one day apart. It is reasonable to assume that when there is a contest for a seat on the board of education, there will be more interest in the election because voters will be concerned about the outcome of the board contest. If the contest generates an active campaign for the board seat, interest will be greater yet. The result may be that voters participate in the budget referendum because they have chosen to participate in the board election. While there is a real question about which election stimulates participation in the other, there is good reason to expect that participation and dissent will be higher when there is an active contest for a seat on the board of education.

## SUMMARY

Based on an analysis of data by a multiple regression technique for 261 of the 690 common, union free and centralized school districts in New York State for the original submission school budget elections in the spring of 1969, six conclusions were made about the relationship between electoral behavior and a number of fiscal and economic factors expected to stimulate that behavior. The six conclusions are summarized as follows:

1. Approximately one-half of the variance in voter participation and dissent is not explained by the factors used in the study.

2. The most consistent stimuli of participation and dissent are not controllable by boards of education in the year in which the election occurs.

3. Teacher salary increases have no effect on participation and dissent.

4. Non-school fiscal and economic factors are not important predictors of electoral behavior in school budget elections.

5. The influence of fiscal and economic factors on electoral behavior differs according to the geographical area in New York State in which the school district is located.

6. Participation and dissent in school budget elections are highly related.

The increase in school property tax rates and tax levies as a proportion of the total budget over a period of several years were suggested as additional fiscal factors with potential explanatory power.

The proposition was offered that the latent negativism that exists within communities may be stimulated as much by citizen perceptions of the effectiveness of the local schools as by costs of education. Three non-fiscal factors were suggested that could activate the latent negativism with the result that voters withdraw their support from the school district by casting negative ballots in the school budget election. They are:

1. Community conflict over a non-fiscal educational issue.

2. Organized opposition to the board of education.

3. Contests for seats on the board of education.

## BIBLIOGRAPHY

Berelson, Bernard; Lazarsfeld, Paul F.; and McPhee, William N. Voting. Chicago: The University of Chicago Press, 1954.

Campbell, Angus; Converse, Philip E.; Miller, Warren R.; and Stokes, Donald E. The American Voter. Ann Arbor, Michigan: Survey Research Center, University of Michigan, 1960.

_____; Gruin, Gerald; and Miller, Warren E. The Voter Decides Evanston, Ill.: Row Peterson Co., 1954.

Carter, Richard F. and Savard, William G. The Influence of Voter Turnout on School Bond and Tax Elections. Cooperative Research Monograph No. 5. Washington, D.C.: United States Government Printing Office, 1961.

_____, and Odell, William R. The Structure and Process of School-Community Relations: A Summary, Volume V. Stanford, California: Project CAST, Stanford University, 1966.

Coleman, James S. Community Conflict. Glencoe, Illinois: The Free Press, 1957.

Key, V. O., Jr. Public Opinion and American Democracy. New York: Alfred A. Knopf, 1963.

Lazarsfeld, Paul F.; Berelson, Bernard; and Gaudet, Helen. The People's Choice. 3rd edition. New York: Columbia University Press, 1968.

Minar, David W. "The Community Basis of Conflict in School System Politics." American Sociological Review, XXXI (December, 1966).

Spinner, Arnold. "The Effects of the Extent of Voter Participation Upon Election Outcomes in School Budget Elections in New York State, 1957-66." Unpublished Ph. D. dissertation, New York University, 1967.

"Studies of Public School Support, 1969 Series." The University of the State of New York, The State Education Department Bureau of Educational Finance Research, 1970.

Appendix

Table I

STANDARD REGRESSION COEFFICIENTS AND COMPUTED T VALUES FOR TEN PREDICTOR VARIABLES WITH DISSENT IN PASSING DISTRICTS

| | Variable | Standard Regression Coefficient | Computed T Value |
|---|---|---|---|
| SBI | Increase in school budget | -.001 | -0.13 |
| PTRI | Increase in school tax rate | .004 | 0.49 |
| SAL | Increase in teacher salaries | .008 | 0.74 |
| BA | Increase in BA minimum | -.003 | -0.35 |
| PTL | Proportion of school budget from local property tax levy | .074 | 5.54** |
| DS | Proportion of school budget for debt service | .010 | 1.16 |
| DSI | Increase in debt service | -.000 | -0.50 |
| CB | Increase in county budget | .000 | 0.01 |
| TB | Increase in town budget | -.000 | -0.20 |
| CTTR | Increase in county-town property tax rate | .000 | 0.00 |

* significant at .05 level ** significant at .01 level

Appendix

Table II

STANDARD REGRESSION COEFFICIENTS AND COMPUTED T VALUES FOR TEN PREDICTOR VARIABLES WITH PARTICIPATION IN PASSING DISTRICTS

| | Variable | Standard Regression Coefficient | Computed T Value |
|---|---|---|---|
| SBI | Increase in school budget | -.005 | -0.51 |
| PTRI | Increase in school tax rate | .001 | 0.18 |
| SAL | Increase in teacher salaries | .009 | 0.88 |
| BA | Increase in BA minimum | -.004 | -0.39 |
| PTL | Proportion of school budget from local property tax levy | .077 | 5.60** |
| DS | Proportion of school budget for debt service | .005 | 0.52 |
| DSI | Increase in debt service | -.008 | -0.37 |
| CB | Increase in county budget | .004 | 0.12 |
| TB | Increase in town budget | -.015 | -0.49 |
| CTTR | Increase in county-town property tax rate | .002 | 0.06 |

* significant at .05 level ** significant at .01 level

Appendix

Table III

STANDARD REGRESSION COEFFICIENTS AND COMPUTED T VALUES FOR TEN PREDICTOR VARIABLES WITH PARTICIPATION IN FAILING DISTRICTS

| | Variable | Standard Regression Coefficient | Computed T Value |
|---|---|---|---|
| SBI | Increase in school budget | .001 | -0.02 |
| PTRI | Increase in school tax rate | .003 | 0.27 |
| SAL | Increase in teacher salaries | .001 | -0.06 |
| BA | Increase in BA minimum | .009 | 1.07 |
| PTL | Proportion of school budget from local property tax levy | .063 | 3.56** |
| DS | Proportion of school budget for debt service | .025 | 2.06* |
| DSI | Increase in debt service | -.017 | -1.64 |
| CB | Increase in county budget | .004 | 0.18 |
| TB | Increase in town budget | -.018 | -1.94 |
| CTTR | Increase in county-town property tax rate | -.003 | -0.32 |

* significant at .05 level

** significant at .01 level

Appendix

Table IV

STANDARD REGRESSION COEFFICIENTS AND COMPUTED T VALUES FOR TEN PREDICTOR VARIABLES WITH DISSENT IN FAILING DISTRICTS

| | Variable | Standard Regression Coefficient | Computed T Value |
|---|---|---|---|
| SBI | Increase in school budget | .002 | 0.12 |
| PTRI | Increase in school tax rate | .015 | 1.33 |
| SAL | Increase in teacher salaries | .038 | 0.48 |
| BA | Increase in BA minimum | .009 | 0.92 |
| PTL | Proportion of school budget from local property tax levy | .051 | 2.83** |
| DS | Proportion of school budget for debt service | .022 | 2.15** |
| DSI | Increase in debt service | -.012 | -1.14 |
| CB | Increase in county budget | .004 | 0.42 |
| TB | Increase in town budget | -.020 | -2.18 |
| CTTR | Increase in county-town property tax rate | -.004 | -0.42 |

* significant at .05 level ** significant at .01 level